Before the FEDERAL COMMUNICATIONS COMMUNICATIONS Washington, D.C. 20554

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COMMENTS OF AT&T CORP.

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August 16, 1996

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SUMMARY

Having taken the first important steps toward achieving permanent number portability for local exchange subscribers, the Commission should ensure its effective implementation with equally sound cost recovery rules. The Commission can achieve effective implementation by basing its cost recovery rules on three principles. First, cost recovery rules should identify the categories (and, when necessary, subcategories) of permanent number portability costs that will be incurred by the industry as a whole and by individual carriers. Second, the rules should provide for recovery of costs in a competitively-neutral and efficient manner. Third, the permanent number portability cost recovery rules should exclude carrier costs that are not directly related to number portability.

The Commission should separate permanent number portability costs into three categories, -- industry (i.e., Service Management System ("SMS") costs of permanent number portability, individual carrier costs directly related to permanent number portability, and individual carrier costs not directly related to number portability. This will prevent number portability cost recovery mechanisms from being used to subsidize network upgrades not directly related to number portability, and will prevent shifting of costs from individual carriers to other carriers and industry

participants. This will also ensure that costs of number portability and local exchange entry are recovered in a manner that is both efficient and competitively neutral, consistent with the Telecommunications Act of 1996.

The Commission's rules should recover the first category of costs -- shared industry costs of the regional SMSs -- through rate elements for SMS use established by the local number portability administrators ("LNPAs"), and not through a gross telecommunications revenue tax. Such tax would not only be difficult to administer, but would also reduce incentives for individual carriers to minimize number portability costs.

The Commission's rules should require individual carriers to bear their own costs directly related to implementing number portability. This will provide appropriate incentives for efficiency and will prove fair to incumbent and alternative local exchange carriers alike. In contrast, a "pooling" cost recovery mechanism for such costs will reduce incentives for individual carriers to minimize costs, and potentially increase the costs of competitive exchange and other carriers. The Commission should exclude altogether from cost recovery the costs of equipment and network upgrades not directly related to number portability.

There is no need for the Commission to mandate an "end user surcharge" by all telecommunications carriers to

recover the costs of permanent number portability. Carriers should be free to recover the per-subscriber costs of number consistent with market developments and demands. The Commission should, however, preclude incumbent local exchange carriers from recovering their share of industry costs, or their carrier-specific costs, through increases in prices for bottleneck services (such as access) provided to other carriers. Incumbent local exchange carriers can be permitted to recover a portion of number portability costs through TELRIC pricing of unbundled network elements used to provide number portability, or in wholesale rates for retail exchange services to the extent that number portability costs are not avoided.

Before the FEDERAL COMMUNICATIONS COMMISSION TO SECRETARY WISSION

In the Matter of)

CC Dkt. No. 95-116

Telephone Number Portability) RM 8535

COMMENTS OF AT&T CORP.

Pursuant to the Commission's First Report and Order (the "First Report") and Further Notice of Proposed Rulemaking (the "Further Notice"), 1 released July 2, 1996, AT&T Corp. ("AT&T") hereby submits its comments on the appropriate recovery of the costs of implementing and providing permanent number portability, as required by the Commission's rules and the Telecommunications Act of 1996 (the "1996 Act").

With the <u>First Report</u>, the Commission has taken the first steps toward fulfilling the mandate of the 1996 Act to ensure "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers, without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another." The First Report provides for a permanent,

In the Matter of Telephone Number Portability, CC Docket No. 95-116, First Report and Order and Further Notice of Proposed Rulemaking.

Section 3(30), Communications Act of 1934, as amended.

database solution for number portability that will eliminate the need for alternative exchange carriers to rely on the networks of incumbent local exchange carriers with which they compete, and permits competitively-neutral interim arrangements if permanent number portability is implemented. Although these steps are significant, the achievement of local exchange competition would be substantially impeded if cost recovery mechanisms for permanent portability are not also implemented in an efficient and competitively-neutral manner.

Indeed, the mechanisms adopted for recovery of permanent number portability costs are as critical as number portability itself. Implementation of permanent number portability will involve various investments -- by the industry as a whole, by interexchange carriers, by incumbent local exchange carriers, and by alternative exchange carriers seeking to compete with those incumbents. If effective subscriber choice of local exchange providers is to be established and preserved, cost recovery mechanisms must not permit carriers -- particularly incumbent local exchange carriers -- to shift their fair share of number portability costs to other carriers, thus preventing truly neutral cost recovery and increasing costs of local exchange market entry for potential competitors. This would contravene the procompetitive intent of the 1996 Act.

Moreover, number portability is a network function, ³ facilitating local exchange competition by empowering local exchange customers to sample various service offerings without loss of their telephone numbers. Cost recovery mechanisms will undermine competition if they permit incumbent and other carriers to attribute to the network function of number portability the costs of network equipment and facilities (such as common channel signaling services) that support many different kinds of telecommunications services. This would artificially raise the costs of number portability and competitive local entry, also contrary to the intent of the 1996 Act.

In addition, the cost recovery rules adopted by the Commission should provide appropriate incentives for carriers and industry participants to minimize their costs. Efficient deployment of number portability will expand core capabilities of the public switched network, and enable carriers more easily to make further improvements to their individual networks, resulting in more "rapid, efficient, Nation-wide, and world-wide wire and radio communications services."

See In the Matter of Telephone Number Portability, CC Docket No. 95-116, Comments of AT&T (September 12, 1995), pp. 3-4; Reply Comments of AT&T (October 12, 1995), pp. 3-4.

Section 151, Communications Act of 1934, as amended.

The Commission can achieve proper and effective implementation of number portability by adopting cost recovery rules based on three principles. First, the cost recovery rules should identify categories (and, when necessary, subcategories) of permanent number portability costs that will be incurred by the industry as a whole and by individual carriers. Second, the rules should provide for recovery of industry and individual carrier portability costs in a competitively-neutral manner by defining appropriate cost recovery mechanisms for each category and subcategory. Third, the number portability cost recovery rules should exclude individual carrier costs that are not directly related to permanent number portability.

I. The Commission Should Adopt Rules for Recovery of Three Distinct Categories Of Permanent Number Portability Costs

The <u>Further Notice</u> (¶ 209) is correct in concluding that competitively-neutral cost recovery requires the separation of number portability costs into three basic categories. The Commission's cost recovery rules must first distinguish between costs directly related to number portability and costs that are not directly related, excluding the latter from Section 251(e) recovery altogether. As explained above, number portability is a network function necessary to create opportunities for competition in the local

exchange. The costs necessary to implement it -- and only those costs -- must be identified so that they may then be fairly apportioned among telecommunications carriers. If additional costs of network equipment and facilities not directly related to number portability are included in Section 251(e) recovery, the costs of number portability will be unnecessarily and artificially raised, and opportunities for competitive local exchange entry reduced.

The Further Notice (¶ 208) is correct in concluding that in treating costs directly related to number portability, the Commission must further distinguish between shared industry costs (such as costs incurred to deploy regional Service Management Systems ("SMSs" or state SMSs), and individual carrier costs (such as costs incurred to deploy carriers' proprietary routing databases or signaling systems). Separation of industry costs -- which are necessarily and properly shared by the industry as a whole -- and individual carrier costs --which are controlled by individual industry participants -- is essential to upholding neutrality, competitive opportunity, and efficiency. Without this separation, individual carriers will be encouraged to shift the costs of their own network upgrades to other industry participants, and incentives for carriers to minimize number portability costs will be reduced. Moreover, this separation of costs will enable the Commission to identify properly the

cost recovery mechanisms that must be used with respect to each category of costs, and the group of "telecommunications carriers" from which costs should be recovered. Accordingly, the Commission should treat each of the three categories as detailed below.

A. The Costs of Industry SMSs Should Be Recovered By LNPAs Through Specified Rate Elements

As explained in the <u>First Report and Order</u>, permanent number portability will be implemented at the industry level primarily through regional SMSs administered by local number portability administrators ("LNPAs") selected by the North American Numbering Council ("NANC"). In order to

The Further Notice (¶ 210) seeks comment on whether the two principles established for recovery of the costs of interim portability arrangements should apply to cost recovery for permanent number portability. These principles -- that cost recovery should not create incremental cost advantages and should preserve opportunities for carriers to earn a fair return -- are adequate for interim portability given its reliance on existing infrastructure, its transitional nature and limited duration. These principles are, by themselves, however, insufficient in the context of cost recovery for permanent number portability. To fulfill the Act's mandate, permanent cost recovery rules must prevent shifting of costs between and among network functions and services, and between carriers. Moreover, these principles must provide incentives for carriers to minimize the costs of permanent number portability implementation. The Commission's "interim" cost recovery principles are, nonetheless, useful in helping to assess the competitive neutrality of permanent portability cost recovery principles.

The Commission's rules will allow states to "opt out" (First Report and Order, \P 96) and implement their own state-specific SMSs. These SMSs must conform to the technical and operational standards approved by the Commission (id.) and

deploy and make available a regional SMS, an LNPA will incur initial software and hardware costs to implement the SMS and recurring operational expenses to administer and maintain it. Consistent with proper cost recovery principles, these common, shared regional SMS costs should be recovered so as to ensure that number portability costs are not shifted unfairly to certain industry participants and encourage efficiency in use of the SMS and carrier networks. These objectives can best be achieved through SMS rate elements that reflect the use of the SMS by a carrier or other industry participant, as the Commission required in the context of the 800 service SMS.8 Such rate elements spread industry costs among carriers and participants that make use of the SMS, while providing incentives to individual players to streamline use of SMS functionalities and to create economies of scale with other carriers or industry participants.9

should conform to the Commission's cost recovery rules as well.

It is anticipated, for example, that some information providers that are not common carriers (such as Independent Telephone Networks, Inc. "ITN") may request information from the regional SMS.

See Bell Operating Companies Tariff F.C.C. No. 1.4.1.2.

Smaller carriers might agree to cooperate or "team" (either directly or through a third party such as ITN) for purposes of establishing service or access connections to the SMS.

Although the precise specifications for each regional SMS are not yet known, SMS development under the guidance of state commissions¹⁰ shows that the essential functions to be performed by the SMS will be reflected in five rate elements. These elements are:

Service Establishment: a non-recurring, charge for each user identification number and password allowing service providers to enter data into, or receive data from, the SMS;

SMS Access: a charge for each connection to the SMS for the uploading and/or downloading information to or from the SMS. The rates charged will vary depending on the type and speed of the connection requested;

<u>Portability Information Download</u>: a charge for downloading customer ported number information from the SMS;

Local Exchange Carrier Portability Information: a charge to local exchange carriers for customer profiles added to, deleted from, or maintained in the SMS;¹¹

See e.g., Competition and Development Act of 1995 Local Telephone Number Portability Under Section 2 of the Telecommunications, Docket No. 5840-U, Georgia Number Portability Steering Committee Monthly Status Report No. 4 (July 1996) ("Georgia June Status Report").

This rate element should be structured as a charge for each number maintained in the database only if all local exchange carriers, incumbents as well as alternative carriers load all subscriber numbers in portable NXXs into the regional SMS, consistent with the original concept of the regional SMS. If the SMS is designed and administered so that only "porting" subscriber information is placed in the database, recovery for this function should be structured differently to avoid penalization for porting. In this instance, costs for this function could be recovered, for example, by assessing on all local exchange carriers a charge based on each carrier's share of total working telephone numbers in portable NXXs.

Miscellaneous Charges: separate charges for specialized functions requested by SMS users, (including but not limited to reports, interface testing, custom audits, specialized downloads, and the like)

The Commission's cost recovery rules should mandate the use of these five rate elements by LNPAs selected by the NANC. This rate structure will properly recover costs from both incumbent and alternative local exchange carriers using the SMS to provide portability, and interexchange carriers, intraLATA toll carriers, and other service and information providers who download information from it. Work in the states thus far suggests that the LNPA should be afforded the flexibility to offer these rate elements under publicly-available contracts, in order to permit maximum responsiveness to industry needs.

The Commission should neither require nor permit the recovery of industry costs of permanent number portability through a gross telecommunications revenues tax, as proposed by the <u>Further Notice</u> (¶ 213). Preliminarily, in the context of regional industry SMSs, a revenues tax would pose several significant implementation issues. The Commission would be required to determine, among other things, the precise telecommunications carriers to be taxed, 12 the method by which

The Commission would be required, for example, to determine whether wireless carriers, which are exempted from providing portability until June 30, 1999, should be required

revenues of these carriers would be calculated, 13 and the party that would collect and administer the tax.

Significantly, each of these issues is resolved or obviated by cost recovery through rate elements. Perhaps more significantly, a revenues tax would not provide individual carriers with incentives to most efficiently utilize the SMS, because their costs would be based not on their use of the SMS but on their revenues. Smaller carriers, for example, would have less reason to aggregate their use of elements, and larger carriers would have less incentive to develop ways to reduce their payments through, for example, more efficient SMS access connections.

The Commission should also emphatically reject any cost recovery mechanism, such as that described in the Further Notice (¶ 215), that would permit incumbent local exchange carriers to recover their share of industry number portability costs from other carriers. Such a recovery mechanism would contravene the intent of Section 251(e) by allowing incumbent

to contribute to permanent portability deployment beginning as early as fourth quarter 1997.

The Commission would have to decide, for example, whether pure competitive access services, as well as unswitched private line services, produce "telecommunications" revenues to be taxed. Moreover, the Commission would be required to determine the treatment of certain services, such as enhanced services, that are technically not common carrier services, yet nonetheless sometimes rely on telephone numbers that can be "ported."

local exchange carriers (alone among telecommunications carriers) to avoid their fair share of number portability costs. It would also invite incumbent carriers to shift or "load" number portability costs onto bottleneck services on which competing carriers rely (such as local interconnection services or interstate and intrastate access), raising the costs of potential exchange competitors that rely on these services.¹⁴

In addition to establishing proper cost recovery rules for regional SMSs, the Commission should ensure proper SMS configuration by making it clear that LNPAs or state SMS administrators should not adopt an architecture using an SMS/SCP pair. The regional SMS will be a database that contains information determined to be necessary to route calls; signal control points ("SCPs"), on the other hand, will be part of signaling networks (including signaling transfer

Because number portability is a network function, incumbent local exchange carriers can, consistent with competitive neutrality, recover the costs of providing number portability in the prices for unbundled network elements (such as switching, signaling, etc.) sold to competing carriers. The costs associated with number portability should of course be calculated on a forward-looking, TELRIC basis for each element, and should include only number portability costs specific to that element. Additionally, to the extent that incumbent local exchange carriers provide services subject to the Act's resale requirements, incumbents can be permitted to recover the costs of number portability in both the retail services offered to subscribers, and in the wholesale service offered to other carriers, to the extent that portability costs will not be "avoided" on the discounted wholesale offering.

points, signaling links, and other facilities) that will transmit this information to proprietary carrier networks so that they may properly route calls. The optimal number portability architecture will not attempt to combine the SMS and SCP functions at the industry level, but will instead use a pure SMS (i.e., an "SMS only" structure) that provides information to carrier-owned SCPs. This architecture will permit carriers to design and incorporate into the SCPs any additional routing information or functionalities they choose, an option that will be precluded by an industry SMS/SCP pair. An "SMS only" structure will also eliminate reliance on a single industry SCP that could disable all carriers serving a region with a single breakdown or failure.

B. The Commission Should Adopt Cost Recovery Rules Requiring Each Carrier To Bear Its Own Carrier-Specific Permanent Number Portability Costs

The remaining costs of permanent number portability

-- those costs directly attributable to a carrier's

modification of its network to provide permanent number

portability -- can be most efficiently and fairly recovered by

requiring each carrier to bear its own costs. This cost

As the <u>Further Notice</u> (¶ 221) recognizes, these costs include, among other things, the costs of purchasing switch software necessary to implement permanent number portability.

recovery mechanism is competitively-neutral¹⁶ and, equally important, provides carriers with economic incentives that will not undermine implementation of permanent number portability. When required to bear their own costs, carriers will be encouraged to conceive, design, and implement their network modifications with maximum efficiency, consistent with the Commission's performance criteria.

Moreover, there is no need for concern that this approach is unfair to incumbent local exchange carriers. Permanent number portability will require all participating carriers to undertake additional network investment, including upgrades of switch software and installation of signaling links and signaling hardware. Although incumbent local exchange carriers may be required initially to incur more of these costs to deploy number portability capabilities, they will have a larger customer base that will benefit from the increased competition and customer choice that number portability provides, and a larger customer base over which to spread these costs. 17 Conversely, alternative exchange

Further Notice, ¶ 136 ("[A] mechanism that requires each carrier to pay for its own costs of currently available number portability would also be permissible").

Indeed, AT&T estimates that the costs of implementation are likely to fall within the modest range of \$.25 to \$.30 per subscriber line per month, over a five year period. See AT&T Ex Parte Submission, May 22, 1996. For its part, Time Warner estimates that, in the Chicago metropolitan statistical area, the cost of number portability will be \$.29 per subscriber per month over a five-year period. See Ex Parte Submission of

carriers may initially incur fewer costs to implement number portability, but will be required to spread these lesser costs over a smaller number of local exchange subscribers. 18

Consistent with the Commission's principles of competitive neutrality, neither incumbent nor alternative exchange carriers will be substantially advantaged or disadvantaged by this approach, and no carrier will be denied and opportunity to earn a fair return.

In contrast, the "pooling" arrangement described in the <u>Further Notice</u> (¶ 221) will promote inefficiency without countervailing benefits. Under this arrangement, carriers will be encouraged to make uneconomic upgrades to their networks. This incentive will artificially inflate the costs of implementation of number portability, and increasing the costs of carriers seeking to enter the local exchange market.¹⁹

Time Warner Communications Holdings, Inc., February 12, 1996, p. 6. It is also true that number portability, and other conditions necessary to promote local exchange competition, will benefit a broad range of telecommunications carriers by stimulating demand for services. With their share of the costs, incumbent local exchange carriers stand to gain a similar share of the benefits of competition.

Moreover, with time, as alternative exchange carriers win over local exchange customers from incumbent LECs, alternative exchange carriers will incur increased switch software and signaling costs, just as the incumbent LECs initially incurred, in order to support number portability for additional subscribers.

In contrast, a sharing of "interim portability" costs will not permit carriers to undermine opportunities for local

The Commission need not adopt specific mechanisms for recovery of carrier-specific number portability costs from subscribers. In particular, there is no need for the Commission to adopt the proposal described in the <u>Further Notice</u> (¶¶ 223-224) to mandate use of an "end user surcharge" to be assessed on subscribers in areas where number portability is available. In an evolving telecommunications market, carriers should be afforded the flexibility to recover charges from customers consistent with market demands and developments. There would also appear to be little justification for such a surcharge, because the per-subscriber costs of number portability should prove quite small.

The interest expressed in the <u>Further Notice</u> (¶¶ 225, 230), however, in rules governing recovery of carrier-specific costs from other carriers is appropriate, and the Commission should adopt rules concerning recovery of such costs. In particular, the Commission should preclude incumbent local exchange carriers from recovering these costs through increases in charges to other carriers for bottleneck services (e.g., price cap or rate-of-return regulated services such as access), including increases through requests for

exchange competition by "gold plating" their networks. The costs associated with interim number portability arrangements (such as remote call forwarding) fall within a much narrower range (essentially existing switching and transport functions) than do permanent number portability costs, and thus present substantially fewer opportunities to inflate costs.

exogenous cost treatment for such services. Permitting price increases for bottleneck services will allow incumbent exchange carriers to shift their carrier-specific costs to other carriers, preventing competitively-neutral cost recovery and unfairly increasing costs of potential competitors. One of the competitive competitive competitions and unfairly increasing costs of potential competitors. Description of the unbundled exchange carriers will have the opportunity to recover number portability costs through TELRIC pricing of the unbundled network elements that provide number portability, and in wholesale rates for local exchange retail services to the extent that number portability costs are not avoided.

For similar reasons, the Commission should not permit incumbent local exchange carriers subject to rate of return regulation to recover carrier-specific costs of number portability through increases in charges for bottleneck services provided to other carriers.

The Commission inquires (¶ 224) as to whether subscriber charges for portability should be made uniform from region to region and carrier to carrier. Provided that appropriate cost recovery mechanisms are adopted, there is no need for the Commission to establish uniform charges for subscribers, or to mandate the basis on which carriers recover their costs from customers. Customer demands will determine the optimal arrangement, if any. Although carrier-specific number portability costs may vary from region to region, there is no reason to conclude that they will vary significantly or more widely than costs for other network functions, costs for network elements, or costs for services provided to subscribers.

C. The Commission Should Require Carriers To Recover Costs Not Directly Related to Number Portability Through Mechanisms Other Than Costs Recovery Rules

The Further Notice (¶ 226) is correct in concluding that costs that are not directly related to implementing number portability should be borne by individual carriers. Network modifications (such as the installation of SS7, IN, and AIN capabilities) that allow carriers to offer new or improved services, or that enhance the efficiency with which carriers provide existing services, are regularly undertaken, independent of number portability or other requirements of the of the Telecommunications Act. By excluding these costs from number portability recovery, the Commission will ensure that carriers continue to make decisions regarding these network modifications based on market forces and customer demand for capabilities and services. More important, carriers should not be permitted to use implementation of number portability -- or any of the other functionalities necessary to promote local exchange competition -- to require competing carriers to subsidize upgrades to their networks. This would again fundamentally undermine local exchange competition, by artificially raising the costs competitive of creating the conditions necessary to create competitive opportunities in the local exchange. In addition, the Commission should not, as the Further Notice tentatively concludes (¶ 230), permit

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exogenous cost treatment for these costs, particularly with respect to bottleneck services (such as access) provided by incumbent local exchange carriers to other carriers, including potential competitors.

Conclusion

For the reasons set forth above, the Commission should adopt cost recovery rules that identify categories and subcategories of permanent number portability costs, provide for competitively-neutral and efficient recovery of these costs, and exclude from cost recovery those carrier costs that are not directly related to permanent number portability.

Respectfully submitted,

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August 16, 1996

CERTIFICATE OF SERVICE

I, Karen Gillis, do hereby certify that on this 16th day of August, 1996, a copy of the foregoing "Comments of AT&T Corp." was mailed by U.S. first class mail, postage prepaid, to the parties listed on the attached

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